

Rejections under 35 U.S.C. § 103

Claims 104 and 118-157 were rejected under 35 U.S.C. §103(a) as being unpatentable over Walter *et al*, U.S. Patent No. 5,856,788 (Walter) in view of Werb, U.S. Patent No. 6,483,427 (Werb). Applicants respectfully traverse the rejection.

In the rejection of independent claims 104, 135, and 143, the Examiner states that Walter discloses an inventory system and method comprising a plurality of electronic tags and a tag reader which "performs multiple reads of the tags to *avoid time slot contention.*" (Office Action, pg. 3)(emphasis added). Applicants respectfully disagree with the Examiner's understanding of Walter. As discussed in Applicants' Reply and Amendment of September 22, 2003, the tags disclosed by Walter do not respond during one of a plurality of time slots. The Examiner agrees with this point later in the Office Action by stating "Walter does not explicitly disclose the use of 'time slots' for the responses." (Office Action, pg. 4 and pg. 9). Because Walter does not disclose the use of time slots, Walter further does not disclose or suggest an inventory system that "performs multiple reads of said RFID tags to avoid contention when two or more RFID tags respond *during the same time slot*," as recited in claim 104; a radio frequency identification (RFID) tag that comprises "a means for receiving a first signal from the tag reader, the tag reader performs multiple reads of the RFID tag to avoid *time slot contention*", as recited in claim 135; or a method for conducting an electronic inventory of RFID tags including the step of "resolving contention between multiple RFID tags if at least two of said RFID tags respond *during the same time slot* to said first signal, including transmitting a second signal to said plurality of RFID tags", as recited in claim 143. (emphasis added).

The Examiner further states that although Walter "does not explicitly disclosed [sic] that a plurality of bits are read each time," Werb discloses tags having a Unique Identifying Code and that "the tag can be configured to send shorter transmission more frequently." (Office Action, pg. 3). The Examiner then concludes that it would have been obvious to combine Walter and Werb to achieve the invention as recited in claim 104, 135, and 143. In order to establish a *prima facie* case of obviousness, there must be some suggestion or motivation to modify the reference or combine the reference teachings. There is absolutely no suggestion in Walter that a plurality of bits can be used to interrogate the tags nor that using a plurality of bits would work in the algorithm described by Walter. The Examiner agreed with this point in the Interview with Applicants' Representative on July 21, 2003. (Interview Summary) ("The Examiner agreed that based on this discussion the use of a plurality of bits was not obvious.")

The Examiner also states that Werb "discloses using a synchronization signal modified by the tag's UIC [sic] to determine the appropriate time slot in which each tag is to respond as one way to counter receiving signals from two or more tags simultaneously." (Office Action, pg. 4). Applicants respectfully disagree with the Examiner's understanding of the collision avoidance method described by Werb. In Werb, a tag "wakes up periodically, converts any incoming 2440-megahertz signal 106 to an outgoing 5780-megahertz signal 107, while modulating its UID [unique identifying code] and other data onto the outgoing signal ... The tag does not explicitly respond to an interrogation signal." (Werb, col. 12, lines 28-38). To avoid collisions occurring when two or more tags transpond simultaneously, Werb discloses calculating a pseudorandom number "which incorporates the tag's UID" to randomize the time interval between instances when a tag wakes-up to "chirp" its UID (or shorter code). (Werb, col.

12, lines 39-col. 13, line14). The cell controller "duplicates the tag's pseudorandom number generator to calculate the times of all future chirps of the tag." (Werb, col. 13, lines 43-45). Thus, in Werb, the tag transponds the same UID (or shorter code) each time it wakes-up regardless of the value of the UID (or shorter code); it is the time interval between "chirps" that is randomized to avoid collisions.

Thus, Werb does not disclose or suggest an inventory system wherein an "RFID tag responds to said tag reader with a first plurality of said plurality of bits during a first read and a second plurality of said plurality of bits during a second read", as recited in claim 104; an RFID tag that includes "means for transmitting a second signal to the tag reader in response to receiving a first signal from the tag reader, wherein said second signal includes a first plurality of said plurality of bits during a first read and a second plurality of said plurality of bits during a second read from the tag reader", as recited in claim 135; or a method for conducting an electronic inventory of RFID tags including the step of "receiving a reply from said plurality of RFID tags during one of a plurality of time slots, said tags responding to said first signal based on the value of a first plurality of said plurality of bits", as recited in claim 143.

Both Walter and Werb fail to disclose or suggest at least the foregoing features. Absent motivation for the alleged combination, a proper rejection under §103 cannot be sustained. Applicants respectfully submit that the combination of Walter and Werb fails to teach or suggest all the features of independent claims, 104, 135, and 143. Applicants therefore request that the Examiner reconsider and withdraw this rejection. Dependent claims 106-134, 136-142, and 144-157 are patentable for at least the above reasons.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Robert Sokohl
Attorney for Applicants
Registration No. 36,013

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

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